## ABSTRACT

Respective components of a leukocyte particle size pattern that includes a plurality of cellular component fractions are separated by performing a mixture density approximation using an EM algorithm, and characteristic parameters of each fraction are clustered. A similarity search with attention paid to a distribution pattern of a cell group of interest is thereby executed. An algorithm capable of doing a highly accurate similarity search from general viewpoints such as a search for the respective cellular components of a leukocyte or a combination of the respective components is developed. In addition, information useful for a diagnosis is provided.

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